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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,717	08/08/2006	Daisuke Kojima	060586	1159
23850 7590 02/09/2009 KRATZ, QUINTOS & HANSON, LLP 1420 K Street, N.W. Suite 400 WASHINGTON, DC 20005				
EXAMINER				
BERMAN, SUSAN W				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/588,717

Applicant(s)

KOJIMA ET AL.

Examiner

/Susan W. Berman/

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12-18-2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 7-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

The rejection of claims under 35 U.S.C. 102(e) as being anticipated by Higuchi et al (US 2005/0239990, having an effective filing date of 12-20-2004) is withdrawn. Applicant has provided a certified translation of applicant's Japanese Application 2004-49826. Japanese Application 2004-49826 was filed 12-20-2004, preceding the 02-25-2004 effective date of US '990 to Higuchi et al. It is agreed that the present claims are fully supported by the translation of applicant's prior Japanese Application 2004-49826.

Response to Arguments

Applicant's arguments filed 12-28-2008 have been fully considered and found persuasive with regard to amended claim 1. J '221 discloses products wherein component (d) is obtained by reaction of acrylic acid with a maleimide group-containing monobasic acid and a diepoxy compound. The optional reaction product (d) of diepoxide (a), maleimide monobasic acid (b) and the optional (meth)acrylic acid (c) could contain three unsaturated groups and one hydroxy group or four unsaturated groups. However, there is no motivation found to select a maleimide-functional product having two maleimide groups, one acrylate group and one hydroxy group from the three possible maleimide reaction products (d) for reaction with the polyisocyanate (f) and compound with two hydroxy and one carboxyl group (e) in the disclosed resin composition.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. It is not clear how the film is “formed using the photocurable resin composition” in claim 10 or how a layer is “formed using the photocurable dry film” in claims 12 or claim 13. It is not clear how the composition or film is used. It is suggested that claims 10 and 12 read “formed by applying the photocurable resin composition according to claim 1 to a substrate and drying the composition”. It is suggested that claim 13 read “formed by applying the photocurable dry film according to claim 10 to a substrate and irradiating the film”.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 7-11 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Oshima (6,777,155). Oshima discloses a photosensitive layer comprising a polyurethane resin binder. The polyurethane resin binder is the reaction product of an aliphatic cyclic structure having a substituent carboxyl group and two hydroxy groups of formula (I) with a diisocyanate compound, an optional additional diol compound and an endcapping monomer, wherein the endcapping monomer can be a hydroxy-functional mono(meth)acrylate or poly(meth)acrylate (column 4, column 15, lines 4-62, and column 17, lines 38-49, Synthesis Examples 5-6). The endcapping monomers specifically taught include glycerol di(meth)acrylate and pentaerythritol triacrylate (see P-4, P-12, P-28 in Tables 1 and 2). Radical initiators are taught in column 38, lines 46-54. Organic solvents are taught in column 46, lines 31-53. Dry films are taught in the Examples.

Allowable Subject Matter

Claims 12-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The cited prior art does not teach or suggest optical waveguides obtained from the disclosed compositions.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Zahora et al (6,085,010) disclose optical glass fiber ribbon assemblies formed from radiation curable compositions. The composition comprises an adhesion adjusting oligomer that is represented by one of formulae (2), (3) and (4) described from column 9, line 51, to column 10, line 27, and column 14, lines 10-18.

Diamon et al (6,414,100) disclose UV-absorbing compositions comprising polyurethane acrylates obtained by reaction of a polyisocyanate, a polyol and hydroxy methacrylate, including glycerol di(meth)acrylate or pentaerythritol tri(meth)acrylate (column 10, line 39, to column 11, line 8).

Smith (5,739,240) discloses modified acrylic urethane prepolymers prepared by reaction of a diisocyanate with a hydroxyl-containing acrylate, such as pentaerythritol triacrylate (column 3, line 54, to column 4, line 21). Smith teaches that the high acrylate functionality of the disclosed prepolymers provides improved cure properties to polyester resins. See column 2, line 52, to column 3, line 35.

Puder (4,973,611) disclose optical fiber buffer coating compositions comprising acrylate urethane oligomers with specific mono-functional aryl-containing acrylate monomers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Susan W. Berman/ whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SB
2/3/2009

/Susan W Berman/
Primary Examiner
Art Unit 1796